

I CLAIM:

1. A method of preparation and coating of heat-absorbing pigment comprising the steps of:
- (a) preparing an appropriate amount of prepolymer aqueous solution of polytri-cyanamide aldehyde resin;
 - (b) preparing a mixture of a melted heat-absorbing material and a dye at a ratio of about 1000:3 until completely dissolved;
 - (c) adding the solution in (b) to about 5 volume of PVA aqueous solution and stirring the solution with an agitator at 6000 rpm to form emulsion;
 - (d) heating solution of (a) at 55°C and stirring for about 1 hour;
 - (e) filtering and drying the obtained micro-capsule after the reaction is terminated; and
 - (f) dissolving and dispersing 30 parts of micro-capsule with 70 parts of solvent and spraying onto the surface of a metallic or non-metallic article.
2. The method of claim 2, wherein the heat-absorbing material includes straight-chain alkanes, alcohols, and organic acids.
3. The method of claim 3, wherein the straight-chain alkanes and alcohols include.
4. The method of claim 1, wherein the solvents include epoxy resin, polyester

resin.

5. The method of claim 1, wherein the heat-absorbing material is a non-dyed heat-absorbing pigment, and the heat-absorbing pigment is added to the solvent or a general pigment.
- 5 6. The method of claim 1, wherein the heat-absorbing pigment is coated onto the surface of an article.

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